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(84) Ventricular synchronised atrial pacemaker.

(87) An atrial pacemaker having an atrial pacing rate adjusted to correspond to a detected ventricular heart rate to maintain A-V synchrony in a range between a minimum and maximum pacing rate. Sensed ventricular depolarizations not associated with a preceding atrial pacing stimulus cause the atrial pacing rate to be increased. One-shots 26, 28, 30 define a period after an atrial pulse on line 11 within which a properly synchronized ventricular pulse should fall. If it does not, a signal on lines 22, 42, CL increases the count in counter 64 which defines the pacing rate. When A-V synchrony is restored at a higher rate, the rate is decreased by counter 48 becoming full and providing a count down signal on line 70. Under-drive stimulation to treat pathologic tachycardia is achieved as the atrial pacing rate is increased in steps to the maximum pacing rate, normally lower than typical tachycardia rates.

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